

09/112,777 (Silverbrook et al.)



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/112,777 07/14/98 SILVERBROOK

K 42724 JB
EXAMINER

TML2/0112

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ART UNIT	PAPER NUMBER
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AIR MAIL

2672
DATE MAILED: 01/12/91

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/112,777	Applicant(s) SILVERBROOK ET AL.	
	Examiner Motilewa A. Good-Johnson	Art Unit 2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2000.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- | | |
|---|--|
| 14) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 15) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 16) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 19) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to communications: application, filed on 07/10/1998; Amendment A, filed on 10/30/2000.

This action is made final.

2. Claims 1-7 are pending in the case. Claim 1 is an independent claim. Claim 1 has been amended. Claims 5-7 have been added.
3. The present title of the application is "Producing Automatic *Painting* Effects in Images" (as originally filed).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani et al., U.S. Patent Number 5,621,868, "Generating Imitation Custom Artwork by Simulating Brush Strokes and Enhancing Edges", class 345/431, 04/15/1997.

As per independent claim 1, **a method of automatically processing an image comprising the steps of : locating within the image feature having a high spatial variance;**

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thresholding the features to produce a threshold binary image; discarding features of the threshold binary image having a size less than a predetermined size; and stroking the image with a series of brush strokes emanating from remaining features having high spatial variance. Mizutani et al. discloses in col. 2, lines 3-9 and in lines 14-24.

With respect to dependent claim 2, . . . **brush strokes have decreasing sizes near important features of the image.** Mizutani et al. discloses in col. 2, lines 25-30.

With respect to dependent claim 4, . . . **the position of a predetermined portion of brush strokes undergoes random jittering.** Mizutani et al. discloses in col. 2, lines 11-12.

With respect to dependent claim 5, . . . **applying a Sobel filter to the image to produce a greyscale image indicating a per-pixel edge-strength of the image.** Mizutani et al. discloses in col. 8, lines 51-57.

With respect to dependent claim 6, . . . **thresholding comprises discarding located features having an edge-strength of less than a predetermined proportion of maximum edge strength.** Mizutani et al. discloses in col. 10, lines 23-42.

With respect to dependent claim 7, . . . **discarding located features having a size of less than 20 pixels.** Mizutani et al. discloses in col. 9, lines 59-67 and in col. 10, lines 1-22.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over, Mizutani et al. in view of Sheasby et al., U.S. Patent Number, 5,999,190, "Computer Imaging Using Graphics Components", class 345/431, 12/07/1999, filed 06/11/1997.

With respect to dependent claim 3, . . . **brush strokes include opacity and bump maps for added realism.** Mizutani et al. discloses in figure 8B, element 246, and in figure 11B, element 290. It would have been obvious to one of ordinary skill in the art to include said opacity and texture or bump maps to provide for added realism as disclosed in Mizutani et al. col. 6, lines 14-15.

Response to Amendment

8. Applicant's arguments filed 10/30/2000 have been fully considered but they are not persuasive. Applicant argues that Mizutani produces brushstrokes arranged perpendicular to a direction of maximum contrast. Mizutani discloses brushstrokes, which emanate from the regions of maximum contrast. It is inherent that if said threshold image is contained in the region of maximum contrast then said brushstroke would be oriented from the threshold image. Applicant further argues that Mizutani fails to disclose thresholding the original image by applying a Sobel filter. Mizutani discloses in col. 8, lines 52-56, a filtering operation to locate contrast regions in the image, such as Sobel filtering. Mizutani discloses in col. 10, lines 23-42, processed pixels in a first buffer and unprocessed pixels in a second buffer, it is inherent that if said threshold is not met for any pixels than all of said pixels would be processed.

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Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any response to this action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703)-308-9051 (**formal** communications intended for entry),

Or:

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(703)-305-9724 (**informal** communications labeled **PROPOSED** or **DRAFT**).

Hand-delivered responses should be brought to:

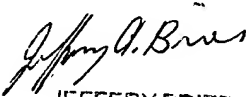
Sixth Floor Receptionist, Crystal Park II, 2121 Crystal Drive, Arlington, VA.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa Good-Johnson, whose telephone number is (703)-305-3939 and can normally be reached Mondays-Fridays from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi, can be reached at (703)-305-4713.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703)-305-4700.

Motilewa Good-Johnson
Patent Examiner
Art Unit 2672


JEFFERY BRIER
PRIMARY EXAMINER